

INTERNATIONAL SEARCH REPORT

Interns Application No

PCT/GB 03/00111

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 E05B47/00 E05B13/00 E05B63/16 E05C9/00 E05B41/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 474 348 A (PALMER RALPH P ET AL) 12 December 1995 (1995-12-12)	1, 2, 4-7, 9-11, 23-25
A	the whole document ---	3, 8, 12
X	US 5 791 179 A (BRASK JAMES E) 11 August 1998 (1998-08-11)	1-6, 10-12, 23-25
A	the whole document ---	15
X	EP 0 657 606 A (WILHELM DÖRRENHAUS GMBH & CO KG) 14 June 1995 (1995-06-14) column 3, line 1 - line 22 ---	1, 2, 18, 19, 23-25
X	DE 100 28 176 A (DORN MICHAEL) 13 December 2001 (2001-12-13)	1, 2, 4, 19, 23-25
A	paragraph '0004!; figures 1, 2 ---	18
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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P document published prior to the international filing date but later than the priority date claimed

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

9 May 2003

Date of mailing of the international search report

22/05/2003

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 936 122 A (OSADA SHUNICHI) 26 June 1990 (1990-06-26)	1,2,4,5, 10,11, 23-25
A	the whole document ---	3,8,12
X	US 4 390 197 A (BUTTS LAWRENCE D) 28 June 1983 (1983-06-28) the whole document -----	1,2,4-6, 10-12, 23-25

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PCT/GB 03/00111

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5474348	A	12-12-1995	NONE	
US 5791179	A	11-08-1998	NONE	
EP 0657606	A	14-06-1995	DE 4340537 A1 EP 0657606 A1	01-06-1995 14-06-1995
DE 10028176	A	13-12-2001	DE 10028176 A1 WO 0194726 A1 EP 1292747 A1	13-12-2001 13-12-2001 19-03-2003
US 4936122	A	26-06-1990	NONE	
US 4390197	A	28-06-1983	CH 658097 A5 GB 2107778 A , B HK 58685 A	15-10-1986 05-05-1983 16-08-1985